University of New Brunswick, Saint John
Winter 2011

Math 3073 (1B): Partial Differential Equations

TIME, LOCATION:	MWF 12:30-13:20, IH107
INSTRUCTOR:	Trevor Jones
OFFICE:	IH 6^3
EMAIL:	trevor.jones@unb.ca
WEBSITE:	http://www.math.unb.ca/∼thj
TEXT:	*Partial Differential Equations, An Introduction*, 2^{nd} Edition, by Strauss
GRADES:	20% Assignments and quizzes 30% Test (February 4 and March 21) 50% Final Exam: To be scheduled.
PREREQUISITE:	MATH 2003 and MATH 2013; or MATH 2513; or equivalent.
NOTE:	Late assignments will not be accepted. All assignments must be e-mailed in PDF format to thj.math@gmail.com by no later than 11:59pm local time on the day due. Time received with be the standard for late assignments. On the first page of each assignment, your name and UNB e-mail address must be clearly written. Corrected assignments will be returned via your UNB e-mail address.
SYLLABUS:	Methods of solution for first order equations. Classification of second order equations. Characteristics, analytic and numerical methods of solution for hyperbolic, elliptic and parabolic equations.
OUTCOMES:	It is expected, upon successful completion of this course, that the student

- will demonstrate an understanding of the concepts of partial differential equations and their applications to other areas of study
- will be able to justify conclusions using valid mathematical arguments
- will be able to communicate results using appropriate styles, conventions, and terminology
- will be able to accurately perform calculations without the aid of a calculator or computer
- will be able to transfer expertise between different topics in mathematics